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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/852,883
Filing Date: May 11, 2001
Appellant(s): VORNSAND, STEVEN J.

Trevor B. Joike
Reg No: 25,542
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 29 August 2007 appealing from the Office action mailed 03 May 2007.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying there are no related appeals or interferences in the brief is correct.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments

All amendments have been entered.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Grounds of Rejection To Be Reviewed On Appeal

The appellant's statement on the grounds of the rejection in the brief is correct.

(7) Claims 31-47 (Appendix)

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal:

	Davies et al.,	US 6,753,790	06-2004
	Ben-Ze'ev	US 6,791,467	09-2004
	Shintani et al.,	US 6,532,592	03-2003
OFFICIAL NOTICE	Humpleman et al	US 6,603,488	08-2003
	Redford et al.	US 5,839,905	11-1998

Escobosa et al	US 5,537,463	07-1996
Launey et al	US 5,086,385	02-1992
Staller	US 6,759,967	07-2004

Evidence Appendix

The statement contained in the brief stating there is no submitted evidence from the appellant is correct.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 31-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies, US 6,753,790 in view of Ben-Ze'ev, US 6,791,467 and Shintani et al., US 6,532,592.

In considering claims 31, 41-42 and 46,

*a) the claimed a host device having a host processor...*is met by remote controller (300) which processes received signals, where the system can toggle between reception/transmission (receiver/transmitter) via IR/RF (via toggling 360), utilizing user control input 310/user interface 330, where detector 320 detects whether the remote controller is within a feedback range of a target device.

*b) the claimed a television processor...*is met by a target device which may be a television set (col 3, line 6-22) where the television set receives/processes the request from the user via the remote controller

(300) and when the user is in a location where the confirmation via a "line-of sight" is not possible, the TV sends a signal back confirming that the control signal was successfully sent to and executed by the target device (col 1, line 53-62).

However, Davies does not explicitly recite a "plurality of dispersed televisions" (limitation b), nor determining which televisions (plural) do not transmit the confirmation signals. Davies discloses a system where the user may activate target devices (i.e. audio, video and television devices) where the user can activate and receive confirmation on the remote (via the target device) by being in a different room than the target device.

Although, the use of more than one television is notoriously well known in the art, as also stated by appellant (background pages 1-2), the examiner incorporates Ben-Ze'ev which discloses a single master adaptive remote controller which is able to control the appliances in a household including multiple TV's (Fig 1). Ben-Ze'ev also is able to interrogate the appliances periodically to ascertain their status (on, off etc...(col 9, line 52-59, col 10, line 49-65) and to also receive confirmation that an appliance has executed/performed a commanded function (col 13, line 44-50).

Regarding the determining which device does not transmit the confirmation signals, the examiner relies upon Shintani, which discloses a remote which receives confirmation signals or error signals, or requests for additional information if unable to execute the current user request. Thus the limitation of which TV doesn't transmit confirmation signals, is met where the TV sends signals, which aren't confirmation of the executed function, thereby informing the remote of the status of a user request. Thus when the remote receives other than a confirmation signal back to the remote, the remote acknowledges/display an error or provides any additional information needed to carry out the initial request.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Davies which discloses a system which allows the user to control and receive confirmation from target devices, by being in a different room than the device, where Davies discloses a separate room may includes a television, with Ben-Ze-ev by allowing the user to interact with all the televisions/target devices

in a dwelling (multiple rooms, house), and with Shintani by allowing the user/remote to ascertain the confirmation/execution or not of a user requests, thereby providing the user(s) the ability to control (receive confirmation from or not) all the televisions/target devices the user(s) has/have access to with a single remote control.

In considering claim 32 and 43,

Davies discloses that the command and confirmation signals may be IR or RF (Fig 3), based upon the feedback range where the feedback range, may be an audible hearing distance or a definitive distance (i.e. ten meters) (col 3, line 31-37).

In considering claims 33 and 37,

Davies discloses a remote controller, which operates as the host and peripheral device, where the remote is responsive to a user input to generate a control signal.

In considering claims 34,

Davies does not explicitly disclose the target devices including peripheral devices such VCR and DVD player, and a host device such as a PC. Davies does disclose that target devices such as electronic equipment such as audio and video devices, including televisions, including a remote which may be formed via a PDA (personal digital assistant).

However, Ben-Ze'ev discloses the use of a VCR (Fig 7). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Davies which discloses the control of target devices within/outside of a room, with Ben-Ze'ev by controlling all the devices that are included in the household (i.e. VCR), thereby giving the user complete control over the target devices he/she has access to in their dwelling.

In considering claims 35,

The combination of Davies/Ben-Ze'ev/Shintani does not disclose the peripheral device comprising a digital video disc player.

However, a digital video disc player is a notoriously well known appliance which is used in conjunction with a TV, thus the examiner takes "OFFICIAL NOTICE" regarding such a peripheral device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination which discloses a system which is able to command/control all the appliances in a household and ascertain the execution of a command/control function, by controlling all appliances including a digital video disc player if available, in order to provide the user control over all available appliances.

Although not traversed, the examiner evidences the use of a DVD player, which may be controlled by a remote control (Fig 1, DVD player 24d), by incorporating Staller, US 6,759,967.

In considering claim 36,

Ben-Ze'ev discloses that the remote controller may be part of a PDA (personal digital assistance) device (i.e. personal computer).

In considering claims 38 and 47,

The claimed processor is met by the television, which receives, transmits and processes the signals between the target devices and the remote.

Although, the combination does not explicitly disclose a timer, Davies discloses the control via transmission/reception of peripheral devices, which are integrated into the entertainment system, thereby being able to control multiple devices in a logical/desired sequence. Ben-Ze'ev does disclose a "predetermined period" in the time period to wait for a receipt from an appliance/external device (col 11, line 2-14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination which discloses the confirmation of an executed operation, by confirming to the

user in a desired time period (i.e. using a timer) where conformation maybe within any user desired preset reasonable time (i.e. meeting the claimed .1 or .5 seconds) to inform the user that the command executed has been performed.

In considering claims 39-40, 42 and 45,

The combination does not explicitly recite the confirmation signals comprising a 1200 baud, 8 bits byte, 1 start bit, 1 stop bit, no parity format packet modulated onto a 40 KHz carrier wave, including a command identifier byte, data value byte and check sum byte.

There are multitude of interfaces available to the user/designer, i.e. RS-232, RS-422, RS-423 and RS-485, of course based upon the needs of the user and equipment/peripheral devices being used.

Thus the examiner takes "OFFICIAL NOTICE" regarding the use of a signal, which may include the parameters as claimed, since there are a multitude of conventional transmission/reception schemes available to a designer/user. The examiner also requests the appellant to provide the inventive steps regarding the claimed subject (i.e. is the appellant claiming this is a novel transmission/reception scheme, which was never used/known by others before the appellant discovered it?). The examiner's position is based upon conventional software/hardware which is purchased off the shelf can perform the reception/transmission scheme including that which is claimed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Davies/Ben-Ze'ev which discloses the control of target devices of an entertainment system which may be located in or outside the room of the user, by transmitting/receiving the control/confirmation signals by a conventional/off the shelf protocol scheme.

Although not traversed the examiner evidences the above features by relying upon the following evidence. It should also be noted these claims were previously rejected using such references (as in the Final Rejection 09 Feb 04), however the examiner has since taken "OFFICIAL NOTICE" to reduce the issues with the pending claims. Thus the claims are/were rejected as follows:

Regarding the claimed a 1200 baud, 8 bits byte, 1 start bit, 1 stop bit, no parity format packet modulated onto a 40 KHz carrier wave.

There are multitude of interface available to the user/designer, i.e. RS-232, RS-422, RS-423 and RS-485, of course based upon the needs of the user and equipment/peripheral devices being used.

Thus the examiner incorporates Redford et al., US 5,839,905 which discloses (col 20, line 21-31) transmitting infrared signals via a remote to host devices which utilizes the infrared RS232 serial link at 1200 baud modulated with a 40KHz carrier.

Although, Redford does not disclose the specifics on the RS-232 interface, the examiner incorporates Escobosa et al., US 5,537,463 which discloses (col 8, line 43-53) that the conventional RS-232 interface packet includes one start bit, one stop bit, 8 data bits and no parity. Escobosa does disclose a byte count, data bytes, and the checksum byte (col 8, line 43-53), which meets the claimed data value byte and check sum byte.

However, the combination above does not disclose a command identifier byte.

Thus the examiner incorporates Launey et al., US 5,086,385 which discloses an expandable home automation system which utilizes the RS-232 interface protocol, where the user may use an infrared hand-held remote (22, Fig 1) to command the central processor 10 (host) to perform various tasks, i.e. turn the TV on/off, scan the channels). Launey discloses that a task/command consists of a length byte, a command byte, data bytes and check-sum byte (Table 1, col 29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify/utilize in the combination above which discloses the transmitting/reception of signals via a remote and television(s) to control such devices by using a RS-232 interface as done by Redford, to transmit/receive information from the TV/remote and peripheral devices, where the data at 1200 baud modulated with a 40KHz, which includes the conventional RS-232 format as disclosed by Escobosa to include a packet with one start bit, one stop bit, 8 data bits and no parity, with Launey et al., in order to use the RS-232 protocol to communicate with devices by using the RS-232 protocol to include a command identifier byte, which identifies the command to be carried out to provide the user/designer an existing transmission/reception scheme/interface in controlling the television and other peripheral devices via a remote control.

(10) Response to Arguments

Appellant's Arguments

a) Appellant states that Davies, Ben-Ze'ev and Shintani fail to disclose or suggest plural television that transmit confirmation signals indicating that the televisions have modified their operation.

b) Appellant states that Davies, Ben-Ze'ev and Shintani fail to disclose or suggest a host processor that determines which TV do not transmit confirmation signals indicating that they have modified their operation.

c) The appellant appears to parse/attack the references individually in supporting the arguments with respect to a) and b) above.

Examiner's Response

a) The examiner disagrees. As pointed out by the appellant and in the rejection below, Davies discloses receiving a confirmation signal, wherein Davies discloses providing feedback on the remote controller that the function of the TV was executed. Davies discloses that the remote may send to and receive from the television set, RF signals, which allow the user to control and confirm that the TV set has received and executed (i.e. modified it's operation) the user's instruction(s). The examiner maintains the inclusion of at least one more television (i.e. the claimed plurality of televisions) is notoriously well known and thus the examiner evidenced such by incorporating Ben-Ze'ev which evidenced a remote control system that sends to/receives from all the home appliances including a plurality of TV's (Fig 1, "First TV" and "Second TV") .

b) The examiner disagrees. As stated in the rejection, the examiner relied upon Shintani, which discloses a remote which receives confirmation signals or error signals, or requests for additional information if unable to execute the current user request. Thus the limitation of which TV doesn't transmit confirmation signals, is met where the TV sends signals which aren't confirmation of the executed function, thereby informing the remote of the status of a user request. Thus when the remote receives

other than a confirmation signal back to the remote, the remote acknowledges/displays an error or provides any additional information needed to carry out the initial request, thereby acknowledging/determining an error and resending the command or sending additional information to the device to execute the user desired command (col 2, line 39-56) col 4, line 31-37)

c) In response to appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). It should also be noted that although the appellant's invention appears to determine which TV's do not transmit confirmation signals by the "not receipt" of any signal (i.e. the confirmation signal), this is not claimed. The claim merely calls for acknowledging which TV's do not transmit confirmation signals. In the rejection below the system receives confirmations or non-confirmation signals (i.e. error, need more information etc...) thus meeting the claimed invention. A system that receives a non-confirmation signal from a device, would not be misconstrued with receiving a confirmation signal from such device. It should also be noted that each of the references teach various forms of acknowledgment/determination between the host device (i.e. remote) and external devices (i.e. TV's). The references as shown below were used for specific limitations as stated in the rejection. Although, it should be noted that the combination of references provide many options in determining the status/completion of a command from a remote, emphasizing the examiner's position of obviousness in making the rejection. As recently decided by the Supreme Court in KSR vs. Teleflex, the court stated "If a person of ordinary skill in the art can implement a predictable variation, and would see the benefit of doing so, a 103 likely bars its patentability." In the instant case the use of a remote control to transmit control commands to a plurality of TV's has been demonstrated, the feature of the remote determining/acknowledging confirmation or non-confirmation of the user requested operation has been demonstrated, thus the examiner maintains the rejection.

Davies et al., US 6,753, 790 receives confirmation signals from the TV when the TV has executed the user desired function (i.e. the system has modified it's operation).

Ben-Ze'ev, US 6,791,467 disclose an adaptive remote controller which allows two way communication between the remote and appliances (including multiple TV's) wherein the remote may ascertain the current status of a device (col 12, line 59 to col 13, line 20). In addition Ben-Ze'ev discloses that alert signals may be initiated by appliances for alerting a user that an action is complete (col 13, line 44-50).

Shintanti, US 6,532,592 discloses a bidirectional communication link between a TV and a remote control which receives an error signal from a TV, a confirmation from the TV indicating a valid instruction has been received, in addition to sending a delete signal to the remote when the TV is disconnected so the remote deletes a set of commands pertaining to a disconnected device.

(11) Related Proceeding Appendix

The appellant's statement that there are not related proceedings and thus no corresponding appendix is correct.

For the above reasons, it is believed that the rejections be sustained.

Respectfully submitted,

BPY

27 September 2007

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